



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/669,860	09/24/2003	Shigeyasu Morihiro	08917-090001	4396
26161	7590	12/19/2006	EXAMINER	
FISH & RICHARDSON PC			SASTRI, SATYA B	
P.O. BOX 1022				
MINNEAPOLIS, MN 55440-1022			ART UNIT	PAPER NUMBER
			1713	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	12/19/2006	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/669,860

Applicant(s)

MORIHIRO ET AL.

Examiner

Satya B. Sastri

Art Unit

1713

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 October 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 6-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 6-40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>10/6/06</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This office action is in response to amendment filed on October 6, 2006. *Claims 6-40* are now pending in the application.
2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on October 6, 2006 has been entered.
3. In view of the amendment and arguments presented, all previous rejections are withdrawn and new rejections are presented in this office action.

Information Disclosure Statement

4. The IDS submitted on October 6, 2006 lists a Korean patent. The English language abstract of this document submitted by the applicant has no relevance to the instant invention. Therefore, it has not been considered by the examiner.

Claim Rejections - 35 USC § 112

Art Unit: 1713

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 22 and 23 recite the limitation "A coating layer for vibration damper according to claim 16" and "A coating layer for vibration damper according to claim 17" in the preamble.

There is insufficient antecedent basis for this limitation in the claim.

Previously Cited Statutes

7. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

8. **Claims 6-40** are rejected under 35 U.S.C. 103(a) as being unpatentable over Koger et al. (US 6,646,058 B1).

The prior art to Koger discloses a waterborne paint composition including an opacifying pigment, a core shell polymer latex with acid functionality, and a polymer polymerized from a group of monomers including a macromer having a hydrophobic portion and an ethoxylated portion (abstract). The core shell polymer constitutes the binder latex in the paint composition. Additionally, the paint composition includes a dispersant latex, an opacifying pigment and a thickener (col. 2, lines 20-25, col. 5, lines 37-52). The dispersant is a copolymer of an acid containing monomer in amounts of 20-70 wt.% and a macromer in amounts of 0.5-60 parts by wt. (col. 5, lines 37-52). The macromer is an ethoxylated monomer with ethylenic unsaturation, such as those with 5 to 150 moles of ethylene oxide units with hydrophobic moieties having 6-30 carbon atoms. The generic formula of the macromer is described in col. 7,

Art Unit: 1713

lines 1-15. The dispersant has a particle size of 0.01 to 1 micron. The dispersant latex is formed by free radical emulsion polymerization (col. 6, lines 1-42, col. 7, lines 1-65). The amount of dispersant in the paint composition is preferably from 0.1 to 10 wt.%.

The paint composition may further include thickeners such as those comprising an aqueous emulsion reaction product of an unsaturated carboxylic acid monomer and a macromer comprising an ethoxylated portion and a hydrophobic tail. In a preferred embodiment, the thickener is prepared from the monomers that constitute the dispersant polymer. The thickener particle size ranges from 0.1 to 0.4 micron and may be used in amounts of 0.0 to 20, more preferably from 1-3 wt.% (col. 10, lines 19-67). The paint compositions additionally include inorganic compound that serve as pigments and extenders, in amounts of 5 to 50 wt.% and 0-40% by wt., respectively (col. 9, lines 45-67, col. 10, lines 1-19). The core shell latex polymer may be present in amounts of 5-80% by wt., based on the total solids wt. The total solids content in the paint, by volume, ranges from 20-60% by wt. (col. 11, lines 7-13).

The difference between the prior art and the instant invention is that the prior teaches a broader range for the use of macromer in the dispersant/thickener composition.

The prior teaches a range of 0.5-60 wt.% of the macromer. Given that this range overlaps with the instantly claimed range, it would have been obvious to a skilled artisan to include any amount of the macromer, including amounts recited in instant claims, and thereby obtain the instant invention absent evidence to criticality of the claimed range.

With regard to the preamble, a preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process

Art Unit: 1713

steps or structural limitations are able to stand alone. In re Hirao, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) (process claims, discussed below);

With regard to claims 30, 31, 38 and 39, the opacifying pigment may range from 5-50% by wt. and may include zinc oxide and calcium carbonate.

With regard to the solid mass, the prior art discloses a total solid content as ranging from 20-60% by volume. It is the examiner's position that the pigment/extender/core latex that contribute predominantly to the solid portion of the paint composition have a density in excess of 1 and thus the compositions would intrinsically have a range in mass content excess of 20-60%.

Response to Arguments

9. Applicant's arguments with regard to the presence of the thickener component as an emulsion is not found persuasive, absent evidence to criticality. Instant specification discloses that the thickener may be prepared by a variety of polymerization techniques, including suspension and solution polymerizations.

Conclusion

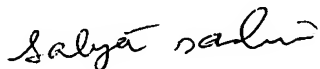
10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Satya Sastri at (571) 272 1112.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached at (571) 272 1114.

Art Unit: 1713


The fax phone number for the organization where this application or proceeding is assigned is (571) 273 8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



SATYA SASTRI

December 13, 2006



DAVID W. WU
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700